PhD Position Competition at the Department of Geomorphology and Quaternary Geology, University of Gdańsk, within the OPUS project

Reconstruction of postdepositional evolution of tills of the last Pleistocene glaciation



The Department of Geomorphology and Quaternary Geology at the University of Gdańsk is looking for a motivated person for a PhD position within the National Science Centre OPUS project.

Project: The scientific aim of this project is to investigate the relationships between weathering, denudation, and variations in in-situ ¹⁰Be concentrations within till profiles of the last glaciation in northern Poland. Weathering signatures are sought in the petrographic, mineralogical, and geochemical composition of the sediments. The degree of denudation in the upper parts of these profiles is quantified through modeling based on measured in-situ ¹⁰Be concentrations. The project was launched in 2024 and will continue over the next four years, in collaboration with external partners from the European Centre for Research and Teaching of Environmental Geosciences (CEREGE) in France and the Research Centre for Astronomy and Earth Sciences (RCAES) in Hungary. As part of the project, four doctoral students are preparing their PhD theses.

PhD Thesis: The PhD student will be responsible for sampling in profiles of tills deposited by the last ice sheet in northern Poland, as well as for preparing these samples for in-situ ¹⁰Be cosmogenic nuclide measurements and estimating the most likely average rates of till denudation and erosion. Additionally, the work will incorporate analyses of soil profiles and GIS-based relief analyses in the vicinity of the study sites to reconstruct the magnitude of denudation. This research will be carried out in close collaboration with Dr. Karol Tylmann (University of Gdańsk), Dr. Vincent Rinterknecht (CEREGE), and Dr. Zsofia Rusziczkay-Rüdiger (RCAES). The doctoral dissertation will consist of a series of scientific articles focusing on the denudation rate of last-glaciation tills in northern Poland.

Location and Duration: The research work will be carried out between 2025 and 2029 in the Geomorphological Reconstruction Laboratory (Department of Geomorphology and Quaternary Geology, Faculty of Oceanography and Geography, University of Gdańsk). In addition to scientific work within the project, the doctoral student will simultaneously participate in the Doctoral School at the Faculty of Oceanography and Geography, University of Gdańsk. Interested candidates should be prepared to commence their work in October 2025.

Funding: As part of the project, all expenses related to fieldwork, laboratory analyses, and participation in scientific conferences will be fully funded. The doctoral student will receive a monthly scholarship of 3,070 PLN during the first two years of doctoral studies. Following a successful mid-term evaluation, the scholarship will increase to 4,700 PLN for the remaining two years. Funding will also cover two research internships, which the doctoral student will be required to complete. Additionally, the university offers accommodation at the Assistant's Hotel (full cost ca. 700 PLN per month).

Requirements for Candidates:

- Master's degree in geography, geology, geophysics or related disciplines;
- Enthusiasm for conducting research work (field and laboratory) and ability to work in a team;
- Proficiency in spoken and written English;
- Full-time availability (100% employment).

Contact: The project is led by Dr. hab. Piotr P. Woźniak, Associate Professor at the University of Gdańsk, and head of the Geomorphological Reconstruction Laboratory. Interested candidates are invited to submit a CV, a reference letter from their master's thesis supervisor or direct supervisor, as well as consent for personal data processing to the following email address: piotr.wozniak@ug.edu.pl. The deadline for applications is July 21st, 2025, at 3:00 PM CEST. The selection decision will be announced by July 31st, 2025. Any questions regarding the scientific scope of the project or organizational and financial details can be directed to the same email address.



